

REMARKS

This Response responds to the Office Action dated April 10, 2006 in which the Examiner rejected claims 46-47, 49-52, 55-59, 62 and 64-65 under 35 U.S.C. §102(e) and rejected claims 48, 53-54, 60-61, 63 and 66-71 under 35 U.S.C. §103.

Applicants respectfully traverse the finality of this response. Applicants respectfully point out MPEP §706.07(a) which states "Under current practice, second or any subsequent actions on the merits shall be final, except where the Examiner introduces a new ground of rejection that is neither necessitated by Applicants amendment of the claims nor based on information submitted in an Information Disclosure Statement..." (emphasis added). Applicants respectfully point out that in response to the Final Rejection issued May 2, 2005, Applicants did not amend the claims. Additionally, Applicants have not submitted an Information Disclosure Statement after the Final Rejection was issued. Therefore, Applicants respectfully submit that the Final Rejection is premature and should be withdrawn.

Claims 46-47, 49-52, 55-59, 62 and 64-65 were rejected under 35 U.S.C. §102(e) as being anticipated by *Wallis et al.* (U.S. Patent 6,282,569).

Applicants respectfully traverse the Examiner's rejection of the claims under 35 U.S.C. §102(e). The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, Applicants respectfully request the Examiner withdraws the rejection to the claims and allows the claims to issue.

Wallis et al. appears to disclose a technique which facilitates a connection between a client program and a server computer on a server in a way that takes into account the current status of the server computers forming the server. (Column 2, lines 42-46). Accordingly a data processing system is provided for facilitating a

connection of a program on a client computer to a server, the server consisting of a plurality of server computers with shared resources, the data processing system, the client computer, and the server computers residing in a network, the system comprising: input means for receiving a request from the client computer for a machine address of a server computer identified by a server computer name sent with the request, such a machine address enabling a connection to be made from the client computer to that server computer via the network; a storage device for storing a list identifying server computer names with machine addresses of the server computers; conversion means for using the list to convert the server computer name received by the input means into the machine address of the server computer; output means for sending the machine address from the conversion means to the client computer; the system being characterised by: decision logic for studying the server computers at predetermined intervals having regard to predetermined test criteria, in order to select one of the server computers; and writing means for updating the list by associating the machine address for the server computer selected by the decision logic with a particular server computer name contained as a generic server computer name in the list; whereby when a client computer specifies the generic server computer name, it receives the machine address of the server computer identified by the decision logic. (Column 2, line 49 to column 3, line 9). Viewed from a second aspect a method of operating a data processing system is provided to facilitate a connection of a program on a client computer to a server, the server consisting of a plurality of server computers with shared resources, the data processing system, the client computer, and the server computers residing in a network, the method comprising the steps of: (a) receiving a request from the client

computer for a machine address of a server computer identified by a server computer name sent with the request, such a machine address enabling a connection to be made from the client computer to that server computer via the network; (b) storing a list identifying server computer names with machine addresses of the server computers in a storage device; (c) converting, with reference to the list, the server computer name received at step (a) into the machine address of the server computer; (d) sending the machine address identified at step (c) to the client computer; the method being characterised by the steps of: (e) employing decision logic to study the server computers at predetermined intervals having regard to predetermined test criteria, in order to select one of the server computers; and (f) updating the list by associating the machine address for the server computer selected by the decision logic with a particular server computer name contained as a generic server computer name in the list; whereby when a client computer specifies the generic server computer name at step (a), it receives the machine address of the server computer identified by the decision logic. (Column 3, line 46 to column 4, line 6). When a program running on a client computer 20 (for clarity, only one client computer is illustrated) wishes to obtain access to a server computer (40, 50, 60) in the cluster it will communicate with the data processing system 10 in order to obtain a full Internet machine address for the desired server (Internet addressing is part of the TCP/IP protocol). (Column 4, lines 60-65). In a storage device 80 of the data processing system a list is maintained which identifies server computer names with particular Internet addresses. When the conversion means is initiated the copier 90 copies this list from the storage device 80 into a piece of local memory 100 accessible by the conversion means 70. Hence the conversion means will access

the list in memory 100 to find the Internet address of the computer associated with the server computer name passed to it by the input means 30. This Internet address will then be provided by the conversion means to the output means 110 for transmission back to the client computer 20. Once the client computer has the Internet address it can then make direct contact with the server computer residing at the Internet address provided; in FIG. 1 this is server computer 2. (Column 5, lines 5-19). In preferred embodiments a further feature is provided to enable the decision logic to temporarily implement a "round-robin" metric instead of the above described 'studying' process. The round-robin principle will be familiar to those skilled in the art; basically when a client application requests access to a server computer it is assigned a particular server computer, and when the next request is received then that application is assigned the next server computer in the cluster, and so on. In this way the server computers are rotated so that each successive server access is made on a different server computer to the previous server access. Alternatively the server computers can be rotated at fixed time intervals rather than after each access request. Although the round-robin technique does not have regard to the loading on any of the server computers, and so there is no determination of the least busy server computer, there are certain situations (eg. where there are lots of client applications which only take a short amount of database connection time) where a round-robin approach is acceptable. To implement the round robin approach the decision logic 120 would ask the writing means 160 to update the storage device 80 after each access request has been handled (or at fixed time intervals if the alternative approach is used), so that the generic name is always associated with successive server computers in the cluster in turn. (Column 9, lines 4-29).

Thus, *Wallis et al.* merely discloses a data processing system 10, a client computer 20 and server computers 40, 50, 60 residing in a network. Thus, nothing in *Wallis et al.* shows, teaches or suggests a system including a) a data transmission device and a data receiving device which are connected to a network and b) at least one portable terminal as claimed in claims 46, 51, 58 (and 66). Rather, all of the data processing system of *Wallis et al.* is connected to a network.

Additionally, *Wallis et al.* merely discloses a client computer 20, server computers 40, 50, 60 and a data processing system 10. Nothing in *Wallis et al.* shows, teaches or suggests at least one portable terminal as claimed in claims 46, 51, 58 (and 66). Rather, the devices of *Wallis et al.* are not described as portable.

Also, *Wallis et al.* merely discloses an input means receiving a request from a client computer for an address of a server computer to enable connection from the client computer to a server computer via a network. Nothing in *Wallis et al.* shows, teaches or suggests a) a transmission unit transmitting to a portable terminal and a receiving unit receiving device information from a portable terminal as claimed in claim 46, b) a transmission unit transmitting device information to a portable terminal according to a request signal from the portable terminal and a connection unit establishing connection with a data transmission device as claimed in claim 51 or c) a portable terminal comprising a transmission unit transmitting to a data receiving device, a receiving unit receiving device information from the data receiving device and a second transmission unit transmitting the device information to a data transmitting device as claimed in claim 58. Rather, *Wallis et al.* merely discloses an input means of a data processing system 10 receives a request from a client

computer 20 and an output means which sends the machine address to the client computer.

Since nothing in *Wallis et al.* shows, teaches or suggests the invention as claimed in claims 46, 51 and 58 as discussed above, Applicants respectfully request the Examiner withdraws the rejection to claims 46, 51 and 58 under 35 U.S.C. §102(e).

Claims 47, 49-50, 52, 55-57, 59, 62 and 64-65 recite additional features. Applicants respectfully submit that claims 47, 49-50, 52, 55-57, 59, 62 and 64-65 would not have been anticipated by *Wallis et al.* within the meaning of 35 U.S.C. §102(e) at least for the reasons as set forth above. Therefore, Applicants respectfully request the Examiner withdraws the rejection to claims 47, 49-50, 52, 55-57, 59, 62 and 64-65 under 35 U.S.C. §102(e).

Claims 48, 53, 60, 63, 66-68, 70 and 71 were rejected under 35 U.S.C. §103 as being unpatentable over *Wallis et al.* in view of *Bender et al.* (U.S. Patent 6,535,918).

Applicants respectfully traverse the Examiner's rejection of the claims under 35 U.S.C. §103. The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, Applicants respectfully request the Examiner withdraws the rejection to the claims and allows the claims to issue.

As discussed above, *Wallis et al.* merely discloses receiving a request from a client computer to enable connection from the client computer to a server computer. Nothing in *Wallis et al.* shows, teaches or suggests a) data transmission and receiving devices connected to a network and b) a portable terminal as claimed in claim 66. Rather, all devices in *Wallis et al.* are connected to a network.

Additionally, *Wallis et al.* merely discloses rotating server computers so that successive servers access to a different server (column 9, lines 4-29). Nothing in *Wallis et al.* shows, teaches or suggests a controller deleting device information if a certain condition is satisfied as claimed in claim 66. Rather, *Wallis et al.* only discloses rotating use of servers but not deletion of device information.

Bender et al. appears to disclose of interfacing data terminal equipment units to wireless data networks. (Column 1, lines 10-12). FIG. 1 is an exemplary embodiment of a terrestrial wireless communication system 10. FIG. 1 shows three remote units 12, 13, and 15 and two base stations 14. In reality wireless communication systems may have many more remote units and base stations. In FIG. 1, the remote unit 12 is shown as a mobile telephone unit installed in a car. FIG. 1 also shows the fixed location remote unit 15 in a wireless local loop system and the portable computer remote unit 13 in a standard cellular system. In the most general embodiment, the remote units maybe any type of communication unit For example, the remote units may be hand-held personal communication system (PCS) units, portable data units such as a personal data assistant, or fixed location data units such as meter reading equipment. FIG. 1 shows a forward link 18 from the base stations 14 to the remote units 12, 13 and 15 and reverse link 19 from the remote units 12, 13 and 15 to the base stations 14. Several commercial systems exist which provide true mobility to the user for data and voice services. The system illustrated in FIG. 1 may use code division multiple access (CDMA), time division multiple access (TDMA), a combination of frequency hopping and TDMA (such as Global System for Mobile Communication (GSM)) or other modulation and access techniques. In the past standards using each of these communication techniques have been initially

developed to provide voice services. The remote units using existing voice standards have been adapted to provide data services--for example, to act as nodes within a digital internetwork. (Column 1, line 49 to column 2, line 10).

Thus, *Bender et al.* merely discloses wireless communication systems using modulation and access techniques. Nothing in *Bender et al.* shows, teaches or suggests a system including a) a data transmission device and a data receiving device which are connected to a network, b) at least one portable terminal and c) deleting device information if a certain condition is satisfied as claimed in claim 66. Rather, *Bender et al.* merely discloses a wireless communication system.

A combination of *Wallis et al.* and *Bender et al.* would not be possible since *Wallis et al.* is directed to connecting devices to a network whereas *Bender et al.* is a wireless network. Even assuming arguendo that the references could be combined, the combination would merely suggest to have all devices of *Wallis et al.* connected to a wireless network as taught by *Bender et al.* Thus, nothing in the combination of the references shows, teaches or suggests a system including a) a data transmission device and a data receiving device connected to a network, b) a portable terminal and c) a controller deleting device information if a certain condition is satisfied as claimed in claim 66. Therefore, Applicants respectfully request the Examiner withdraws the rejection to claim 66 under 35 U.S.C. §103.

Claims 48, 53, 60, 63, 67-68, 70 and 71 recite additional features. Applicants respectfully submit that claims 48, 53, 60, 63, 67-68, 70 and 71 would not have been obvious within the meaning of 35 U.S.C. §103 over *Wallis et al.* and *Bender et al.* at least for the reasons as set forth above. Therefore, Applicants respectfully request

the Examiner withdraws the rejection to claims 48, 53, 60, 63, 67-68, 70 and 71 under 35 U.S.C. §103.

Claims 54, 61 and 69 were rejected under 35 U.S.C. §103 as being unpatentable over *Wallis et al.* in view of *Bender et al.* and further in view of *Liberti et al.* (U.S. Patent 6,947,408).

Applicants respectfully traverse the Examiner's rejection of the claims under 35 U.S.C. §103. The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, Applicants respectfully request the Examiner withdraws the rejection to the claims and allows the claims to issue.

As discussed above, since nothing in *Wallis et al.* or *Bender et al.* show, teach or suggest the primary features as claimed in the claims, Applicants respectfully submit that the combination of the primary references with the secondary reference to *Liberti et al.* would not overcome the deficiencies of the primary references. Therefore, Applicants respectfully request the Examiner withdraws the rejection to claims 54, 61 and 69 under 35 U.S.C. §103.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is requested to contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicants respectfully petition for an appropriate extension of time.

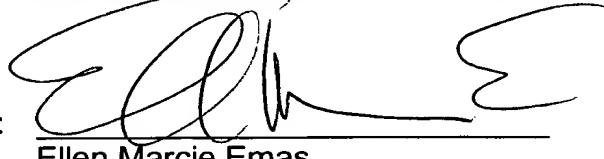
The fees for such extension of time may be charged to Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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Date: July 10, 2006

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